Journal of the Operational Research Society (1996) 47, 1535–1548 ©1996 Operational Research Society Ltd. All rights reserved. 0160-5682/96 $12.00

INDEX TO VOLUME 47, 1996

AUTHOR AND TITLE INDEX

(Excluding *Book Selection* and *Viewpoints*)

Abboud, N. E.:
The Markovian two-echelon repairable item provisioning problem, 284

Achary, K. K.:
(*see* Kumaran, M.)

Adamopoulos, G. I. and Pappis, C. P.:
Single machine scheduling with flow allowances, 1280

Akkan, C.:
Overtime scheduling: an application in finite-capacity real-time scheduling, 1137

Al-Sultan, K. S., Hussain, M. F. and Nizami, J. S.:
A genetic algorithm for the set covering problem, 702

Alvarez-Valdes, R., Martin, G. and Tamarit, J. M.:
Constructing good solutions for the Spanish school timetabling problem, 1203

Alyan, A.:
(*see* Goyal S. K.)

Anderson, E. A. and Diaz, J.:
Using process control chart techniques to analyse crime rates in Houston, Texas, 871

Arad-Geva, T.:
(*see* Mehrez, A.)

Asef-Vaziri, A.:
(*see* Laporte, G.)

Athanassopoulos, A. D. and Curram, S. P.:
A comparison of data envelopment analysis and artificial neural networks as tools for assessing the efficiency of decision making units, 1000

Atkinson, J. B.:
A note on a queueing optimization problem, 463

Aull-Hyde, R. L.:
A backlog inventory model during restricted sale periods, 1192

Baines, D.:
(*see* Bates, J. M.)

Ballestero, E. and Romero, C.:
Portfolio selection: a compromise programming solution, 1377

Barad, M. and Braha, D.:
Control limits for multi-stage manufacturing processes with binomial yield (single and multiple production runs), 98

Barbera, F., Schneider, H. and Kelle, P.:
A condition based maintenance model with exponential failures and fixed inspection intervals, 1037

Bates, J. M., Baines, D. and Whynes, D. K.:
Measuring the efficiency of prescribing by general practitioners, 1443

Bautista, J., Companys, R. and Corominas, A.:
A note on the relation between the product rate variation (PRV) problem and the apportionment problem, 1410

Bazlamaçci, C. F. and Hindi, K. S.:
Enhanced adjacent extreme-point search and tabu search for the minimum concave-cost uncapacitated transshipment problem, 1150

Belton, V. and Elder, M. D.:
Exploring a multicriteria approach to production scheduling, 162

Benkherouf, L. and Mahmoud, M. G.:
Errata. On an inventory model for deteriorating items with increasing time-varying demand and shortage, 842

Benkherouf, L. and Mahmoud, M. G.:
On an inventory model for deteriorating items with increasing time-varying demand and shortages, 188

Berger, P. D.:
(*see* Dant, R. P.)

Bhattacharya, S.:
(*see* Khosla, I.)

Binyamin, S.:
(*see* Mehrez, A.)

Boctor, F. F.:
(*see* Renaud, J.)

Boylan, J. E.:
(*see* Johnston, F. R.)

Braha, D.:
(*see* Barad, M.)

Bretthauer, K. M., Shetty, B. and Syam, S.:
A projection method for the integer quadratic knapsack problem, 457

Broad, K., Mason, A., Rönnqvist, M. and Frater, M.:
Optimal robotic component placement, 1343

Brocklesby, J. and Cummings, S.:
Foucault plays Habermas: an alternative

philosophical underpinning for critical systems thinking, 741

Carlson, M. L., Miltenburg, G. J. and Rousseau, J. J.:
Economic order quantity and quantity discounts under date-terms supplier credit: a discounted cash flow approach, 384
Carter, M. W., Laporte, G. and Lee, S. Y.:
Examination timetabling: algorithmic strategies and applications, 373
Chang, R. W.:
(*see* Pellissier, J. M.)
Chaudhuri, K. S.:
(*see* Giri, B. C.)
Chaudhuri, K. S.:
(*see* Paul, K.)
Chen, I. J. and Chung, C.-S.:
Sequential modelling of the planning and scheduling problems of flexible manufacturing systems, 1216
Cheng, C. H., Goh, C.-H. and Lee, A.:
Solving the generalized machine assignment problem in group technology, 794
Cheng, C. H., Madan, M. S. and Motwani, J.:
Knapsack-based algorithms for designing cellular manufacturing systems, 1468
Cheng, T. C. E., Kovalyov, M. Y. and Tuzikov, A. V.:
Single machine group scheduling with two ordered criteria, 315
Chiang, C. and Chiang, W.-C.:
Reducing inventory costs by order splitting in the sole sourcing environment, 446
Chiang, W.-C.:
(*see* Chiang, C.)
Chiang, W.-C.:
(*see* Kouvelis, P.)
Chinneck, J. W.:
Computer codes for the analysis of infeasible linear programs, 61
Chung, C.-S.:
(*see* Chen, I. J.)
Cochran, J. K.:
(*see* Del Castillo, E.)
Companys, R.:
(*see* Bautista, J.)
Cook, W. D., Kress, M. and Seiford, L. M.:
Data envelopment analysis in the presence of both quantitative and qualitative factors, 945
Cormier, G. and Gunn, E. A.:
Simple models and insights for warehouse sizing, 690
Corominas, A.:
(*see* Bautista, J.)
Cummings, S.:
(*see* Brocklesby, J.)
Curram, S. P.:
(*see* Athanassopoulos, A. D.)

Dagpunar, J. S.:
A maintenance model with opportunities and interrupt replacement options, 1406
Dangerfield, B. and Roberts, C.:
An overview of strategy and tactics in system dynamics optimization, 405
Dant, R. P. and Berger, P. D.:
Modelling cooperative advertising decisions in franchising, 1120
Darzentas, J. and Spyrou, T.:
Ferry traffic in the Aegean Islands: a simulation study, 203
Datta, T. K.:
(*see* Paul, K.)
De Korvin, A.:
(*see* Shipley, M. F.)
Del Castillo, E. and Cochran, J. K.:
Optimal short horizon distribution operations in reusable container systems, 48
Despotis, D. K.:
Fractional minmax goal programming: a unified approach to priority estimation and preference analysis in MCDM, 989
Diaz, J.:
(*see* Anderson, E. A.)
Dinçer, C.:
(*see* Kirkavak, N.)
Dowsland, K. A.:
Genetic algorithms – a tool for OR?, 550
Drexl, A. and Haase, K.:
Sequential-analysis based randomized-regret-methods for lot-sizing and scheduling, 251
Drezner, T., Drezner, Z. and Eiselt, H. A.:
Consistent and inconsistent rules in competitive facility choice, 1494
Drezner, Z.:
(*see* Drezner, T.)

Eglese, R. W.:
(*see* Li, L. Y. O.)
Eiselt, H. A.:
(*see* Drezner, T.)
Elder, M. D.:
(*see* Belton, V.)

Fok, K. K.:
(*see* Hendry, L. C.)

Fong, D. K. H. and Gempesaw, V. M.:
Evaluating re-order levels and probabilities of stockout during a lead time for some stock-control models, 321
Frater, M.:
(*see* Broad, K.)
Fryer, M. J.:
(*see* Greenman, J. V.)

Garbe, R.:
(*see* Glazebrook, K. D.)
Gempesaw, V. M.:
(*see* Fong, D. K. H.)
Gendreau, M.:
(*see* Taillard, É. D.)
George, J. A.:
Multiple container packing: a case study of pipe packing, 1098
Gerchak, Y. and Safayeni, F.:
Perfect information with potentially negative value: an intriguing war story and a possible explanation, 710
Ghosh, J. B.:
Siting facilities along a line when equity of service is desirable, 435
Giri, B. C., Goswami, A. and Chaudhuri, K. S.:
An EOQ model for deteriorating items with time varying demand and costs, 1398
Glazebrook, K. D. and Garbe, R.:
Reflections on a new approach to Gittins indexation, 1301
Goes, P. B. and Sumita, U.:
A closed queueing network model to evaluate the impact of recovery operations on the performance of database servers, 122
Goh, C.-H.:
(*see* Cheng, C. H.)
Golenko-Ginzburg, D. and Gonik, A.:
On-line control model for cost-simulation network projects, 266
Gonik, A.:
(*see* Golenko-Ginzburg, D.)
Goswami, A.:
(*see* Giri, B. C.)
Goyal, S. K., Hariga, M. A. and Alyan, A.:
The trended inventory lot sizing problem with shortages under a new replenishment policy, 1286
Greenman, J. V. and Fryer, M. J.:
Hydrocarbon field size distributions: a case study in mixed integer nonlinear programming, 1433
Griffiths, J. D.:
The coefficient of variation of queue size for heavy traffic, 1071
Güder, F. and Nourie, F. J.:
A dual simplex algorithm for piecewise-linear programming, 583
Guignard, M.:
(*see* Lee, H.)
Gunn, E. A.:
(*see* Cormier, G.)
Guo, R.:
(*see* Love, C. E.)
Gupta, A. and Lam, M. S.:
Estimating missing values using neural networks, 229
Gupta, S. M.:
(*see* Karaesmen, F.)

Haase, K.:
(*see* Drexl, A.)
Hao, G. and Lai, K. K.:
Solving the AGV problem via a self-organizing neural network, 1477
Hariga, M.:
Optimal EOQ models for deteriorating items with time-varying demand, 1228
Hariga, M. A.:
(*see* Goyal, S. K.)
Hasslinger, G. and Rieger, E. S.:
Analysis of open discrete time queueing networks: a refined decomposition approach, 640
Hazen, G. B.:
(*see* Pellissier, J. M.)
Healy, P. and Moll, R.:
A local optimization-based solution to the rectangle layout problem, 523
Hendry, L. C., Fok, K. K. and Shek, K. W.:
A cutting stock and scheduling problem in the copper industry, 38
Hill, R. M.:
Optimizing a production system with a fixed delivery schedule, 954
Hindi, K. S.:
(*see* Bazlamaçci, C. F.)
Hindi, K. S.:
Solving the CLSP by a tabu search heuristic, 151
Ho, J. K.-K.:
MPSB research explained, 843
Holtsclaw, H. H. and Uzsoy, R.:
Machine criticality measures and subproblem solution procedures in shifting bottleneck methods: a computational study, 666
Hurter, A. P.:
(*see* Van Buer, M. G.)
Hussain, M. F.:
(*see* Al-Sultan, K. S.)

Islam, T. and Meade, N.:
Forecasting the development of the market for business telephones in the UK, 906

Johnston, F. R. and Boylan, J. E.:
Forecasting for items with intermittent demand, 113

Karaesmen, F. and Gupta, S. M.:
The finite capacity GI/M/1 queue with server vacations, 817
Kazaz, B. and Sepil, C.:
Project scheduling with discounted cash flows and progress payments, 1262
Kelle, P.:
(*see* Barbera, F.)
Khosla, I., Bhattacharya, S. and Tsai, W.-T.:
Scheduling of jobs in a hypercube processing system, 626
Khouja, M.:
A note on the newsboy problem with an emergency supply option, 1530
Kim, J., Leachman, R. C. and Suh, B.:
Dynamic release control policy for semiconductor wafer fabrication lines, 1516
Kim, S. H.:
(*see* Park, K. S.)
Kim, Y.-D.:
(*see* Lee, J.-K.)
Kirkavak, N. and Dinçer, C.:
Performance evaluation models for single-item periodic pull production systems, 239
Kouvelis, P. and Chiang, W.-C.:
Optimal and heuristic procedures for row layout problems in automated manufacturing systems, 803
Kovalyov, M. Y.:
(*see* Cheng, T. C. E.)
Kress, M.:
(*see* Cook, W. D.)
Kumaran, M. and Achary, K. K.:
On approximating lead time demand distributions using the generalised λ-type distribution, 395

Lai, K. K.:
(*see* Hao, G.)
Lam, K. F. and Moy, J. W.:
Improved linear programming formulations for the multi-group discriminant problem, 1526
Lam, M. S.:
(*see* Gupta, A.)
Laporte, G.:
(*see* Carter, M. W.)
Laporte, G.:
(*see* Renaud, J.)
Laporte, G.:
(*see* Taillard, É. D.)
Laporte, G., Asef-Vaziri, A. and Sriskandarajah, C.:
Some applications of the generalized travelling salesman problem, 1461
Leachman, R. C.:
(*see* Kim, J.)
Lee, A.:
(*see* Cheng, C. H.)
Lee, H. and Guignard, M.:
A hybrid bounding procedure for the workload allocation problem on parallel unrelated machines with setups, 1247
Lee, J.-K. and Kim, Y.-D.:
Search heuristics for resource constrained project scheduling, 678
Lee, S. Y.:
(*see* Carter, M. W.)
Lehaney, B. and Paul, R. J.:
The use of soft systems methodology in the development of a simulation of out-patient services at Watford General Hospital, 864
Letchford, A. N.:
Allocation of school bus contracts by integer programming, 369
Li, L. Y. O. and Eglese, R. W.:
An interactive algorithm for vehicle routeing for winter-gritting, 217
Li, S.:
Multi-job cutting stock problem with due dates and release dates, 490
Littlechild, S. C.:
Operational research and regulation: theory and practice, 601
Love, C. E. and Guo, R.:
Utilizing Weibull failure rates in repair limit analysis for equipment replacement/preventive maintenance decisions, 1366
Lurigio, A.:
(*see* Van Buer, M. G.)

McCue, M. J.:
(*see* Ozcan, Y. A.)
Madan, M. S.:
(*see* Cheng, C. H.)
Mahmoud, M. G.:
(*see* Benkherouf, L.)
Mar Molinero, C.:
On the joint determination of efficiencies in a data envelopment analysis context, 1273

Mar Molinero, C.:
Rethinking statistics teaching for operational research, 723
Martin, G.:
(*see* Alvarez-Valdes, R.)
Mason, A.:
(*see* Broad, K.)
Meade, N.:
(*see* Islam, T.)
Mehrez, A., Sinuany-Stern, Z., Arad-Geva, T. and Binyamin, S.:
On the implementation of quantitative facility location models: the case of a hospital in a rural region, 612
Mercer, A. and Tao, X.:
Alternative inventory and distribution policies of a food manufacturer, 755
Mercer, A. and Tielin, D.:
Competitive tendering strategies in the bus industry, 1452
Metters, R. D.:
Interdependent transportation and production activity at the United States Postal Service, 27
Miltenburg, G. J.:
(*see* Carlson, M. L.)
Mittenthal, J., Raghavachari, M. and Rana, A.:
A class of single machine central tendency-dispersion bicriteria problems, 1355
Moll, R.:
(*see* Healy, P.)
Morgan, R. F.:
An intelligent decision support system for a health authority: solving information overload, 570
Morley, I. and Ormerod, R.:
A language–action approach to operational research, 731
Mosheiov, G.:
Λ-shaped policies to schedule deteriorating jobs, 1184
Motwani, J.:
(*see* Cheng, C. H.)
Mould, G. I.:
Case study of manpower planning for clerical operations, 358
Moy, J. W.:
(*see* Lam, K. F.)

Nagy, G. and Salhi, S.:
Nested heuristic methods for the location-routeing problem, 1166
Newhart, D. D.:
(*see* Vasko, F. J.)
Nicholls, M. G.:
Heuristic interpretation of infeasible solutions to a production scheduling problem in cigarette manufacture, 963
Nizami, J. S.:
(*see* Al-Sultan, K. S.)
Nori, V. S. and Sarker, B. R.:
Cyclic scheduling for a multi-product, single-facility production system operating under a just-in-time delivery policy, 930
Nourie, F. J.:
(*see* Güder, F.)
Nowicki, E. and Zdrzałka, S.:
Single machine scheduling with major and minor setup times: a tabu search approach, 1054

Omer, K.:
(*see* Shipley, M. F.)
Orman, A. J.:
(*see* Potamianos, J.)
Orme, C. and Smith, P.:
The potential for endogeneity bias in data envelopment analysis, 73
Ormerod, R.:
On the nature of OR – entering the fray, 1
Ormerod, R.:
Putting soft OR methods to work: information systems strategy development at Richards Bay, 1083
Ormerod, R.:
(*see* Morley, I.)
Ouyang, L.-Y., Yeh, N.-C. and Wu, K.-S.:
Mixture inventory model with backorders and lost sales for variable lead time, 829
Ozcan, Y. A. and McCue, M. J.:
Development of a financial performance index for hospitals: DEA approach, 18

Pal, A. K.:
(*see* Paul, K.)
Papoulias, D. B.:
(*see* Tsoukas, H.)
Pappis, C. P.:
(*see* Adamopoulos, G. I.)
Park, K. S., Kim, S. H. and Yoon, W. C.:
An extended model for establishing dominance in multiattribute decisionmaking, 1415
Paul, K., Datta, T. K., Chaudhuri, K. S. and Pal, A. K.:
An inventory model with two-component demand rate and shortages, 1029
Paul, R. J.:
(*see* Lehaney, B.)
Pellissier, J. M., Hazen, G. B. and Chang, R. W.:
A continuous-risk decision analysis of total

hip replacement, 776
Phillips Jr, S.:
Project management duration/resource trade-off analysis: an application of the cut search approach, 697
Potamianos, J. and Orman, A. J.:
An interactive dynamic inventory-production control system, 1017
Prasad, H. V. V. and Sankaran, J. K.:
Optimization-based distribution planning for consumer electronic items, 895

Raghavachari, M.:
(*see* Mittenthal, J.)
Rana, A.:
(*see* Mittenthal, J.)
Rehman, T.:
(*see* Yates, C. M.)
Renaud, J., Boctor, F. F. and Laporte, G.:
An improved petal heuristic for the vehicle routeing problem, 329
Rieger, E. S.:
(*see* Hasslinger, G.)
Roberts, C.:
(*see* Dangerfield, B.)
Romero, C.:
(*see* Ballestero, E.)
Rönnqvist, M.:
(*see* Broad, K.)
Rosenhead, J. and White, L.:
Nuclear fusion: some linked case studies in community operational research, 479
Rousseau, J. J.:
(*see* Carlson, M. L.)

Safayeni, F.:
(*see* Gerchak, Y.)
Salhi, S.:
(*see* Nagy, G.)
Salminen, P., Teich, J. E. and Wallenius, J.:
A decision model for the multiple criteria group secretary problem: theoretical considerations, 1046
Sampson, S. E. and Weiss, E. N.:
Designing conferences to improve resource utilization and participant satisfaction, 297
Sankaran, J. K.:
(*see* Prasad, H. V. V.)
Sarker, B. R.:
(*see* Nori, V. S.)
Scheithauer, G. and Terno, J.:
The G4-heuristic for the pallet loading problem, 511
Schneider, H.:
(*see* Barbera, F.)
Seiford, L. M.:
(*see* Cook, W. D.)
Sengupta, J. K.:
The efficiency distribution approach in data envelopment analysis: an application, 1387
Sepil, C.:
(*see* Kazaz, B.)
Shek, K. W.:
(*see* Hendry, L. C.)
Shetty, B.:
(*see* Bretthauer, K. M.)
Shipley, M. F., De Korvin, A. and Omer, K.:
A fuzzy logic approach for determining expected values: a project management application, 562
Simpson, L.:
Do decision makers know what they prefer?: MAVT and ELECTRE II, 919
Sinuany-Stern, Z.:
(*see* Mehrez, A.)
Smith, P.:
(*see* Orme, C.)
Spyrou, T.:
(*see* Darzentas, J.)
Sriskandarajah, C.:
(*see* Laporte, G.)
Stewart, T. J.:
Relationships between data envelopment analysis and multicriteria decision analysis, 654
Stott, K. L.:
(*see* Vasko, F. J.)
Suh, B.:
(*see* Kim, J.)
Sumita, U.:
(*see* Goes, P. B.)
Syam, S.:
(*see* Bretthauer, K. M.)

Taillard, É. D., Laporte, G. and Gendreau, M.:
Vehicle routeing with multiple use of vehicles, 1065
Tamarit, J. M.:
(*see* Alvarez-Valdes, R.)
Tao, X.:
(*see* Mercer, A.)
Teich, J. E.:
(*see* Salminen, P.)
Terno, J.:
(*see* Scheithauer, G.)
Thanassoulis, E.:
Altering the bias in differential school effectiveness using data envelopment analysis, 882

Thanassoulis, E.:
Assessing the effectiveness of schools with pupils of different ability using data envelopment analysis, 84
Tielin, D.:
(*see* Mercer, A.)
Tsai, W.-T.:
(*see* Khosla, I.)
Tsoukas, H. and Papoulias, D. B.:
Understanding social reforms: a conceptual analysis, 853
Tuzikov, A. V.:
(*see* Cheng, T. C. E.)

Uzsoy, R.:
(*see* Holtsclaw, H. H.)

Van Buer, M. G., Venta, E. R., Hurter, A. P. and Lurigio, A.:
The effect of vehicular flow patterns on crime and emergency services: the location of cul-de-sacs and one-way streets, 1110
van den Berg, J. P.:
Multiple order pick sequencing in a carousel system: a solvable case of the rural postman problem, 1504
Vasko, F. J., Newhart, D. D., Stott, K. L. and Wolf, F. E.:
Using a facility location algorithm to determine optimum cast bloom lengths, 341
Venta, E. R.:
(*see* Van Buer, M. G.)
Ventura, J. A. and Weng, M. X.:
Single machine scheduling with a common delivery window, 424
Viswanathan, S.:
A new optimal algorithm for the joint replenishment problem, 936

Walker, J.:
A graphical aid for the initial purchase of 'insurance type' spares, 1296
Wallenius, J.:
(*see* Salminen, P.)
Wang, S.:
A dynamic perspective of differences between cognitive maps, 538
Weiss, E. N.:
(*see* Sampson, S. E.)
Weng, M. X.:
(*see* Ventura, J. A.)
White, D. J.:
A Lagrangean relaxation approach for a turbine design quadratic assignment problem, 766
White, D. J.:
Rectilinear location revisited, 181
White, L.:
(*see* Rosenhead, J.)
Whynes, D. K.:
(*see* Bates, J. M.)
Williams, D. and Wirth, A.:
A new heuristic for a single machine scheduling problem with set-up times, 175
Wirth, A.:
(*see* Williams, D.)
Wolf, F. E.:
(*see* Vasko, F. J.)
Wright, M.:
School timetabling using heuristic search, 347
Wu, K.-S.:
(*see* Ouyang, L.-Y.)

Yates, C. M. and Rehman, T.:
Integration of Markov and linear programming models to assess the farmgate and national consequences of adopting new bovine reproductive technologies in the United Kingdom agriculture, 1327
Yeh, N.-C.:
(*see* Ouyang, L.-Y.)
Yeh, Q.-J.:
The application of data envelopment analysis in conjunction with financial ratios for bank performance evaluation, 980
Yoon, W. C.:
(*see* Park, K. S.)

Zdrzałka, S.:
(*see* Nowicki, E.)
Zhou, Y.-W.:
Optimal production policy for an item with shortages and increasing time-varying demand, 1175
Zhu, J.:
Data envelopment analysis with preference structure, 136

VIEWPOINTS INDEX

Achary, K. K.:
(*see* Kumaran, M.)

Brocklesby, J.:
New methods for old: on the take-up of methodological complementarism, 1318

Clark, D. N. and Scott, J. L.:
Response to 'OR/MS and strategic management', 474

Drezner, Z., Gurnani, H. and Pasternack, B. A.:
Response to a viewpoint on an EOQ model with substitutions between products, 477

Goyal, S. K.:
An EOQ model with substitutions between products, 476
Gurnani, H.:
(*see* Drezner, Z.)

Johnston, R. B.:
Thinking about acting and acting are different – reply to the comment on my paper, 1080

Kumaran, M. and Achary, K. K.:
Response to Shore, 1427

Lakshminarayanan, S.:
(*see* Weitz, R. R.)
Lawrie, N. L.:
Making manufacturing practices tacit – a comment on Johnston's paper, 1078

Miser, H. J.:
Comments prompted by 'On the nature of OR – entering the fray', 1322

Ormerod, R.:
New methods for old, 1317
Ormerod, R.:
Response to Miser: the objects and objectives of operational research, 1323

Pasternack, B. A.:
(*see* Drezner, Z.)
Pidd, M.:
OR/MS and strategic management, 473

Scott, J. L.:
(*see* Clark, D. N.)
Shore, H.:
On using the generalized Λ-type distribution, 1425

Weitz, R. R. and Lakshminarayanan, S.:
On a heuristic for the final exam scheduling problem, 599

SUBJECT INDEX

(This index includes all *papers* and *Viewpoints*)

Activity network, 266
Advertising, 1120
Aegean Islands, 203
Agriculture, 1327
Allocation, 895
Analytic hierarchy process, 612
Apportionment problem, 1410
Approximate decomposition, 239
ARIMA models, 871
Automated guided vehicles, 1477
Automatic data scanning, 570

Backorders, 829, 1175, 1192
Bank branches, 1000
Bank performance evaluation, 980
Batching, 1054
Beale Medal 1995, 1431
Benders decomposition, 1262
Bicriterion scheduling, 315, 1355
Bidding, 1452
Blackett Memorial Lecture, 601
Bovine reproductive technologies, 1327
Budget reassignment, 266
Bus transport, 1452
Business process re-engineering, 843

Cellular manufacturing, 1468
Chance constraint, 266
Chvatal's algorithm, 702
Cigarette manufacture, 963
Coefficient of variation, 1071
Cognitive mapping, 538
Combinatorial analysis, 511
Community operational research, 479
Competitive tendering, 1452
Competitors' strategies, 1452
Complementarianism, 1317
Compromise programming, 1377
Computational analysis, 666
Computers, 122, 626
Concave-cost optimisation, 1150
Condition based maintenance, 1037
Conference planning, 297
Conflict analysis, 1046
Consultancy, 1
Consumer behaviour, 1494
Containers, 1098
Continuous-risk utility assessment, 776
Contract allocation, 369
Control charts, 871
Cooperative advertising, 1120
CPM, 697
Crime rates, 871
Critical systems thinking, 741, 843
Cul-de-sacs, 1110
Culture, 1317
Cutting stock problem, 38, 490, 511, 523
Cyclic scheduling, 930

Data envelopment analysis, 18, 73, 84, 136, 654, 882, 945, 980, 1000, 1273, 1387, 1443
Database systems, 122
Decision analysis, 710, 776, 919, 1415
Decision support systems, 358, 570, 1110
Decomposition, 640
Deliberative rationality, 731
Deteriorating items, 188, 842, 1228, 1398
Deteriorating jobs, 1184
Deterministic scheduling, 1184
Difference equation simulation, 48
Differential effectiveness, 84, 882
Discrete time queues, 640
Discriminant analysis, 1526
Discrimination, 945
Distribution, 48, 755, 895
Distribution of efficiency, 1387
Dual simplex methods, 583
Dynamic programming, 435, 511, 803, 1017, 1037, 1301, 1433, 1504

Econometrics, 73
Economic manufacturing quantity, 954
Education, 84, 347, 599, 723, 882, 1203, 1273
Effective lead time, 321
Efficiency, 73, 136, 1387
ELECTRE, 919
Electricity, 601
Emancipation, 741
Energy, 1433
EOQ models, 1228, 1398
Equipment replacement, 1366
Errata, 842
Examination timetabling, 373, 599
Exponentially weighted moving average, 113

Facility location, 341, 435, 1494
Finance, 18
Financial ratios, 980
Fixed-quantity delivery, 954
Flexible manufacturing systems, 803, 1216, 1477
Flow allowance, 1280
Forecasting, 113, 755, 906
Formulation assistance, 61
Foucault, 741
Fractional goal programming, 989
Franchising, 1120
Fuzzy expected value, 562
Fuzzy logic, 562

Gaussian quadrature rules, 321
General practitioners, 1443
Generalised travelling salesman problem, 1461
Genetic algorithms, 550, 702
Gittins indexation, 1301
Goal programming, 989, 1526
Government, 73
Graph colouring, 373
Group technology, 794
Growth curves, 906

Habermas, 741
Health care, 612, 776
Health service, 864, 1443
Heavy traffic, 1071
Heuristic optimisation, 405
Heuristics, 38, 162, 175, 217, 329, 347, 424, 511, 523, 550, 599, 666, 678, 963, 1065, 1098, 1150, 1166, 1203
Hip replacement, 776
Hospitals, 18, 612, 864
Hydrocarbon field size, 1433

Implicit enumeration, 702
Incomplete information, 1415
Infeasibility analysis, 61
Infeasibility heuristic, 963
Influential diversification, 347
Information, 853
Information management, 570
Information systems, 122
Information systems strategy, 1083
Integer programming, 27, 38, 369, 457, 702, 803, 963, 1098, 1216, 1262, 1343, 1433
Interactive models, 1017
Inventory, 113, 188, 321, 384, 395, 446, 476, 690, 755, 829, 842, 936, 1017, 1029, 1175, 1192, 1286, 1296, 1398, 1425, 1530
Inventory/routeing, 27

Job-shop scheduling, 162
Joint-replenishment, 936
Just-in-time, 930

Knapsack algorithm, 1468
Knowledge based systems, 570

Lagrangian decomposition, 1247
Lagrangian heuristic, 702
Lagrangian relaxation, 424, 1247
Language–action perspective, 731
Layout, 794, 803, 1468
Lead time, 321, 829
Lead time demand, 395, 1425
Lean production, 1078
Linear programming, 48, 61, 583, 1327, 1526
Little's result, 284
Location, 181, 341, 435, 612, 1110, 1166, 1494
Logistics, 690
Lost sales, 829
Lot-sizing, 98, 151, 251, 1286

Maintenance, 1037, 1366, 1406
Management of change, 853
Manpower planning, 358
Manufacturing, 1078, 1216, 1468, 1516
Markov chains, 284, 1327
Markov processes, 239
Mathematical programming, 766
MAVT, 919
Medal Awards 1995, 201
Medal Awards 1996, 1432
Methodology of OR, 1
Microcomputing, 1017
Mining, 1083
Missing values, 229
Mixed integer programming, 1262, 1433
MPSB research, 843
Multi-criteria analysis, 1377
Multi-criteria decision making, 162, 612, 654, 919, 989, 1415
Multi-product firms, 1273
Multi-stage processes, 98
Multiple sourcing, 321

Network flows, 151
Network programming, 1150
Networks, 697, 895
Neural networks, 229, 538, 1000, 1477
Newsboy problem, 395, 1425, 1530
Non-parametric methods, 1000
NP-complete problem, 702

On-line control, 266
One-way streets, 1110
Open queueing networks, 640
Operations management, 1078
Order-splitting, 446
Outranking, 919

Packing, 511, 1098
Pallet loading problem, 511
Performance evaluation, 239
PERT, 697
Petal method, 329
Philosophy of OR, 1, 731, 1322
Piecewise-linear programming, 583
Policy making, 853
Portfolio selection, 1377
Postal service, 27
Postmodernism, 741
Practice of OR, 1, 473, 601
Preference structure, 136
Preventive maintenance, 1366
Problem structuring methods, 479
Production, 38, 98, 162, 239, 794, 930, 963, 1017, 1078, 1137, 1175, 1216, 1343, 1504
Production planning, 151
Production rate variation problem, 1410
Production-inventory systems, 954, 1017
Project management, 562, 678, 697
Project scheduling, 1262
Pull production, 239
Purchasing, 384, 1192

Quadratic assignment, 766
Quadratic knapsack problem, 457
Quadratic programming, 794
Queueing, 122, 463, 640, 817, 1071, 1301

Refereeing 1995, 839
Regenerative processes, 284
Regret based biased random sampling, 251
Regulation, 601
Release control, 1516
Reliability, 284, 1037
Repair, 1406
Repair limit, 1366
Replacement, 1366, 1406
Replenishment, 1286
Resource allocation, 710
Retail stores, 1494
Reusable container systems, 48
Richards Bay, 1083
Risk, 776
Robotic component placement, 1343
Rural postman problem, 1504

Scheduling, 38, 162, 175, 251, 315, 424, 490, 599, 626, 666, 1054, 1137, 1184, 1203, 1216, 1247, 1280, 1301, 1410
Schools, 84, 347, 1203
Science, 1, 1322
Sea transport, 203
Search, 678
Secretary problem, 1046
Self-organising feature maps, 1477
Semiconductor fabrication, 1516
Sequencing, 1054, 1184, 1343, 1355, 1504
Set-covering problem, 702
Setup times, 1054
Shortages, 188, 842, 1029, 1175, 1228, 1286, 1398
Simulation, 203, 297, 358, 463, 864, 1000, 1137
Single machine group scheduling, 315
SLK due-date determination method, 1280
Social epistemics, 731
Social reforms, 853
Soft OR, 1083
Soft Systems Methodology, 864
Spanish schools, 1203
Spares, 1296
Spreadsheet models, 358
Statistics, 723, 1433
Steel application, 341
Stochastic processes, 817, 1301
Stochastic project, 266
Stochastic trees, 776
Stochastic yield, 98
Storage, 1029
Strategic management, 473
Sweep heuristic, 329
System dynamics, 405
Systems, 853, 864, 1317
Systems methodologies, 1317

Tabu search, 151, 347, 1054, 1065, 1150
Target setting, 882
Teaching, 723
Technical and scale efficiency, 1000
Technology, 1
Time series, 871, 906
Time-varying demand, 188, 842, 1175, 1228, 1398
Timetabling, 297, 347, 373, 599, 1203
Total systems intervention, 843
Traffic, 203, 1110
Transshipment problem, 1150
Transshipments, 755
Travelling salesman problem, 1461
Trended inventory, 1286

Urban studies, 1110
Utility, 1377

Value of information, 710
Vehicle replacement, 1366
Vehicle routeing, 27, 217, 329, 1065, 1166
Visual interactive modelling, 162

Warehousing, 690, 1504
Winter gritting, 217

BOOK SELECTION INDEX

Adan, I. J. B. F.:
A Compensation Approach for Queueing Problems, 469
Anderson, E. J.:
The Management of Manufacturing: Models and Analysis, 597
Arbel, A.:
Exploring Interior-Point Linear Programming Algorithms and Software, 961

Barth, P.:
Logic-Based 0–1 Constraint Programming, 1422
Beer, S.:
Beyond Dispute: The Invention of Team Syntegrity, 716
Bertsekas, D. P.:
Dynamic Programming and Optimal Control. Volume 1, 833
Bertsekas, D. P.:
Dynamic Programming and Optimal Control. Volume 2, 833
Blazewicz, J., Ecker, K. H., Schmidt, G. and Weglarz, J.:
Scheduling in Computer and Manufacturing Systems (Second Edition), 592
Brucker, P.:
Scheduling Algorithms, 1077
Bunday, B. D.:
An Introduction to Queueing Theory, 1423

Caunt, D.:
(*see* Hackett, G.)
Chatfield, C.:
Problem Solving: A Statistician's Guide, 835

De Carteret, C. and Vidgen, R.:
Data Modelling for Information Systems, 717
Drezner, E. (Ed.):
Facility Location: A Survey of Applications and Methods, 1421

Eccles, T.:
(*see* Hendry, J.)
Ecker, K. H.:
(*see* Blazewicz, J.)

Gammeron, A. (Ed.):
Probabilistic Reasoning and Bayesian Belief Networks, 721
Ghoshal, S.:
(*see* Hendry, J.)
Gray, P. (Ed.):
Decision Support and Executive Information Systems, 719
Grenvill, D. M.:
(*see* Law, C. E.)

Hackett, G. and Caunt, D.:
Quantitative Methods: An Active Learning Approach, 838
Harnden, R. and Leonard, A. (Eds.):
How Many Grapes Went into the Wine: Stafford Beer on the Art and Science of Holistic Management, 338
Hendry, J., Eccles, T. with Ghoshal, S., Jenster, P. and Williamson, P. (Eds.):
European Cases in Strategic Management, 1201
Hoebeke, L.:
Making Work Systems Better – A Practitioner's Reflections, 471
Holloway, J., Lewis, J. and Mallory, G. (Eds.):
Performance Measurement and Evaluation, 339
Horst, R., Pardalos, P. M. and Thoai, N. V.:
Introduction to Global Optimization, 962

Ichiishi, T.:
The Cooperative Nature of the Firm, 593

Jayaratna, N.:
Understanding and Evaluating Methodologies: NIMSAD, A Systemic Framework, 594
Jenster, P.:
(*see* Hendry, J.)
Jessop, A.:
Informed Assessments: An Introduction to Information, Entropy and Statistics, 472

Koole, G. M.:
Stochastic Scheduling and Dynamic Programming, 1313
Kulkarni, V. G.:

Modeling and Analysis of Stochastic Systems, 1311

Law, C. E., Lindsey, G. R. and Grenvill, D. M. (Eds.):
Perspectives in Science and Technology: The Legacy of Omond Solandt, 1315
Leonard, A.:
(*see* Harnden, R.)
Lewis, J.:
(*see* Holloway, J.)
Lindsey, G. R.:
(*see* Law, C. E.)

McIntosh, K. G.:
Engineering Data Management – A Guide to Successful Implementation, 720
Mallory, G.:
(*see* Holloway, J.)
Medhi, J.:
Stochastic Processes (Second Edition), 836
Miles, M. B.:
(*see* Weitzman, E. A.)
Munier, B. R. (Ed.):
Markets, Risk and Money, 721

Nash, S. G. and Sofer, A. (Eds.):
The Impact of Emerging Technologies on Computer Science and Operations Research, 1314

O'Brien, B.:
Information Management Systems: Briefings and Critical Thinking, 834
Ossenbruggen, P. J.:
Fundamental Principles of Systems Analysis and Decision-Making, 470
Ould, M. A.:
Business Processes: Modelling and Analysis for Re-engineering and Improvement, 595

Pardalos, P. M.:
(*see* Horst, R.)

Rayward-Smith, V. J. (Ed.):
Application of Modern Heuristic Methods, 715

St. John Bate, J. and Travell, N.:
Groupware: Business Success with Computer Supported Cooperative Working, 591
Schmidt, G.:
(*see* Blazewicz, J.)
Sciomachen, A. (Ed.):
Optimization in Industry 3: Mathematical Programming and Modeling Techniques in Practice, 837
Sengupta, J. K.:
Dynamics of Data Envelopment Analysis: Theory of Systems Efficiency, 1421
Sofer, A.:
(*see* Nash, S. G.)
Stowell, D. and West, D:
Client-Led Design: A Systematic Approach to Information Systems Definition, 337

Taylor, J. G. (Ed.):
Neural Networks, 596
Thoai, N. V.:
(*see* Horst, R.)
Thomson, N.:
Simulation in Manufacturing, 1312
Travell, N.:
(*see* St. John Bate, J.)
Turban, E.:
Decision Support and Expert Systems: Management Support Systems (Fourth Edition), 717

Ulrich, W.:
Critical Heuristics of Social Planning: A New Approach to Practical Philosophy, 596

Vidgen, R.:
(*see* De Carteret, C.)

Webb, A.:
Managing Innovative Projects, 471
Weglarz, J.:
(*see* Blazewicz, J.)
Weitzman, E. A. and Miles, M. B.:
Computer Programs for Qualitative Data Analysis – a Software Sourcebook, 718
West, D.:
(*see* Stowell, F.)
Williamson, P.:
(*see* Hendry, J.)